

Notice of Allowability

Application No.

10/661,985

Examiner

Thuan D. Dang

Applicant(s)

STERN, DAVID L.

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 2/21/2006.
2. ☒ The allowed claim(s) is/are 1-6, 8, 10-11, 15-18, 22-24, 38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20060303.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. on 3/3/2006.

The application has been amended as follows:

Claim 1 is now recited as:

-- A process for isomerizing xylenes present in a feed containing ethylbenzene comprising:

isomerizing said xylenes in said feed by contacting said feed under conversion conditions with a catalyst system containing a first catalyst and a second catalyst, said first catalyst being unselectivated ethylbenzene conversion catalyst and comprising about 65 parts by weight of ZSM-5 having a crystal size of about 1 micron with about 35 parts by weight of alumina (on a dry basis) and about 0.5 weight percent of rhenium, said second catalyst being xylene isomerization catalyst comprising about 65 parts by weight of ZSM-5 having a crystal size of about 0.02 to about 0.05 micron with about 35 parts of alumina (on a dry basis) and about 0.5 weight percent of rhenium

wherein the amount of said first catalyst present in said catalyst system is an amount greater than 55 percent and less than 90 percent by volume based on the sum of the volumes of the first catalyst and second catalyst.--.

Claim 7 has been canceled.

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Claim 8 is now recited as:

-- The process recited in claim 1, wherein said first catalyst further comprises Pt.--

Claim 9 has been canceled.

Claim 10 is now as:

-- The process recited in claim 1, wherein said ZSM-5 present in said first catalyst has an alpha value from about 100 to about 300.--

Dependency of claim 11 has been changed to --1--.

Claims 12-14, 19-21, and 25-37 have been canceled.

New claim 38 is added as:

--The process recited in Claim 1, wherein said first catalyst requires at least 50 minutes to sorb 30% of the equilibrium capacity of ortho-xylene at 120°C and at an ortho-xylene partial pressure of 4.5 ± 0.8 mm of mercury; and said second catalyst requires less than 50 minutes to sorb 30% of the equilibrium capacity of ortho-xylene at 120°C and at an ortho-xylene partial pressure of 4.5 ± 0.8 mm of mercury.--.

The following is an examiner's statement of reasons for allowance: the prior art of record does not disclose or render obvious a process, as called for in claim 1, for isomerization of a feed containing ethylbenzene in the presence of two different catalysts with a relative amount as called for the claim. One having ordinary skill in the art who studies the applied Chu reference

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(US 4,899,011) and the examples shown in the specification must recognize that the inventor is the first who discovers that the relative amounts of the two catalyst is a parameter which affect to the results of the process such as operation temperature, undesired cracked product such as C5-, paraxylene production, undesired C9+, and xylene loss.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan D. Dang whose telephone number is 571-272-1445. The examiner can normally be reached on Mon-Thu.

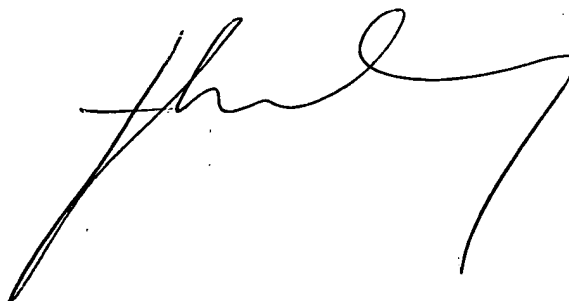
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thuan D. Dang
Primary Examiner
Art Unit 1764

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A handwritten signature in black ink, appearing to read 'Thuan D. Dang', with a stylized, flowing script.